NPIC/TSSG/RED
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Twin Stage Comparator

The Type 1740 Twin-Stage On-Line Stereo Comparator is designed to permit a photo-interpreter to measure, in stereo, small distances on film chips. The viewing system consists of a modified [redacted] 25X1 High Power Stereo Viewer providing a magnification range of approximately 8X to 200X.

Independently controlled high intensity tungsten iodide lamps provide illumination for each leg of the stereo viewing system. Cold cathode lamps mounted beneath the stages provide general illumination. Each of the x-y stages on the comparator is capable of 6" x 6", (152mm x 152mm) of motion. The precision lead screws with optical shaft encoders make it possible to obtain accurate measurements between selected points on the film chips. Signals from the encoders are processed and converted into a format acceptable for on-line computer use by the associated data acquisition system.

The instrument, delivered in October 1969, is presently undergoing test and evaluation, and is anticipated to be available for operational use by mid-December 1969. Cost of this initial stereo comparator was [redacted] 25X1 including the data acquisition system. The instrument was built [redacted] 25X1